AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

COMPLETE LISTING OF THE CLAIMS:

Claims 1-48

(Canceled)

Claim 49

(New)

A path construction means for attempting to

construct a path through a packet network from a source host address to a destination host address,

comprising:

means for signaling to an admission control device for controlling admission

to a section of the path, and for returning information on a range of host addresses controlled by the

admission control device;

another admission control device for controlling admission to another section

of the path;

means for maintaining a reservation state in the admission control devices

when setting up a reservation to another host address controlled by the first-mentioned admission

control device; and

means for examining address ranges returned from multiple reservations, and

for detecting overlapping ranges from concurrent sessions.

Claim 50

(New)

The path construction means as claimed in claim

49, in which the signaling means is operative for returning the address of the first-mentioned

admission control device.

Claim 51

(New)

The path construction means as claimed in claim

50, in which the signaling means is operative for directly signaling to the first-mentioned admission

control device when setting up a reservation to another host address controlled by the first-mentioned admission control device.

Claim 52: (New) The path construction means as claimed in claim 49, in which the admission control device has a release state and a reserved state arranged to achieve a desired quality of service.

Claim 53: (New) The path construction means as claimed in claim 49, wherein the signaling means is operative for returning the information in conjunction with information passed in an attempt to set up a reservation between a source host and a destination host.

Claim 54 : (New) The path construction means as claimed in claim 49, wherein a tunnel reservation is constructed.

Claim 55 : (New) The path construction means as claimed in claim 54, in which the first-mentioned admission control device is arranged to provide address information local to an end of a tunnel.

Claim 56 : (New) The path construction means as claimed in claim 55, including means for moving another reservation in the network into the tunnel.

Claim 56: (New) The path construction means as claimed in claim 49, in which a rate of the section of the path is less than one half of a rate of a preceding section of the path.

Claim 57: (New) The path construction means as claimed in claim 56, in which the rate of the section of the path is less than one tenth of the rate of the preceding section of the path.

Claim 58: (New) A method of attempting to construct a path through a packet network from a source host address to a destination host address, comprising the steps of:

signaling to an admission control device for controlling admission to a section of the path;

returning information on a range of host addresses controlled by the admission control device;

returning the information in conjunction with information passed in an attempt to set up a reservation between a source host and a destination host;

examining address ranges returned from multiple reservations; and detecting overlapping ranges from concurrent sessions.

Claim 59: (New) The method as claimed in claim 58, including another admission control device for controlling admission to another section of the path, and maintaining a reservation state in the admission control devices when setting up the reservation to another host address controlled by the first-mentioned admission control device.

Claim 60 : (New) The method as claimed in claim 58, in which the signaling step is performed by returning the address of the first-mentioned admission control device.

Claim 61: (New) The method as claimed in claim 60, in which the signaling step is performed by signaling directly to the first-mentioned admission control device when setting up the reservation to another host address controlled by the first-mentioned admission control device.

Claim 62 : (New) The method as claimed in claim 58, in which the admission control device has a release state and a reserved state arranged to achieve a desired quality of service.

Claim 63 : (New) The method as claimed in claim 58, and constructing a tunnel reservation.

Claim 64 : (New) The method as claimed in claim 63, in which the first-mentioned admission control device provides address information local to an end of a tunnel.

Claim 65 : (New) The method as claimed in claim 64, including moving another reservation in the network into the tunnel.

Claim 66: (New) The method as claimed in claim 58, in which a rate of the section of the path is less than one half of a rate of a preceding section of the path.

Claim 67: (New) The method as claimed in claim 66, in which the rate of the section of the path is less than one tenth of the rate of the preceding section of the path.